

**City of Winnipeg
Water and Waste Department
South End Water Pollution Control Centre Monitoring Data
June 2013**

Licence 2716RR	Raw Sewage	Final Effluent 24 Hour Composite										Final Effluent Grab Sample		
		TSS		BOD5		cBOD5		Ammonia	Ortho Phosphorus	Total Phosphorus	Total Nitrogen	Temp.	pH	E.Coli
		(mg/L)	(mg/L)*	(mg/L)	(mg/L)*	(mg/L)	(mg/L)*	(kg NH3-N/day)	(mg/L-P)	(mg/L-P)*	(mg/L-N)*	(°C)	(units)	MPN/100 mL
1-Jun-13	125.4	13	13	9	23	7	8	1,681	1.30	2.2	28	13	7.34	(4300)
2-Jun-13	90.2	16	13	10	22	10	8	1,569	1.99	2.2	28	13	7.04	93
3-Jun-13	86.5	11	13	34	23	8	8	1,556	2.29	2.3	28	13	6.96	150
4-Jun-13	78.5	8	12	11	22	6	8	1,539	1.78	2.3	28	13	6.93	30
5-Jun-13	73.7	9	12	12	21	6	8	1,533	1.83	2.3	28	14	6.89	23
6-Jun-13	69.4	8	12	12	21	5	7	1,568	2.30	2.3	28	14	6.88	4
7-Jun-13	64.7	7	12	12	20	4	7	1,662	2.74	2.3	28	15	6.81	9
8-Jun-13	61.1	6	11	16	19	4	7	1,551	2.76	2.3	28	15	6.78	9
9-Jun-13	60.1	7	11	19	19	4	7	1,592	2.83	2.3	28	14	6.82	<3
10-Jun-13	61.6	12	11	11	18	6	7	1,658	2.81	2.4	28	15	6.70	4
11-Jun-13	59.5	8	11	10	18	5	7	1,552	3.16	2.5	28	15	6.72	<3
12-Jun-13	61.0	7	11	11	17	5	7	1,679	3.74	2.5	28	ns	ns	ns
13-Jun-13	56.5	9	11	11	17	5	6	1,649	3.43	2.6	28	16	7.00	9
14-Jun-13	55.4	6	11	11	17	4	6	1,607	3.42	2.7	30	16	6.80	<3
15-Jun-13	57.1	10	11	14	17	5	7	1,546	3.03	2.7	30	16	6.69	4
16-Jun-13	54.2	8	11	13	17	5	7	1,516	3.09	2.7	30	16	6.71	4
17-Jun-13	55.5	13	11	12	17	8	7	1,638	3.48	2.8	30	16	6.76	7
18-Jun-13	54.5	16	12	15	17	nr	7	1,713	3.60	2.8	30	16	6.99	28
19-Jun-13	53.8	14	11	17	17	11	7	1,656	3.23	2.9	31	17	6.80	430
20-Jun-13	58.3	35	12	33	18	23	7	1,704	3.02	3.0	32	17	6.64	210
21-Jun-13	75.0	17	12	16	18	9	8	1,552	1.85	3.0	32	17	6.77	930
22-Jun-13	55.7	14	12	11	17	6	8	1,431	2.58	3.0	32	17	6.75	93
23-Jun-13	85.8	32	13	30	17	21	8	1,794	2.47	3.0	32	16	6.69	150
24-Jun-13	82.8	10	13	12	16	5	8	1,425	1.76	3.0	31	16	6.90	43
25-Jun-13	64.6	20	14	nr	16	nr	8	1,273	2.33	3.0	31	18	6.75	23
26-Jun-13	140.5	11	14	nr	16	nr	8	1,756	1.38	3.0	31	16	7.09	(1500)
27-Jun-13	81.1	17	14	31	16	18	8	1,541	2.32	3.0	31	17	6.92	43
28-Jun-13	70.7	ns	14	ns	16	ns	8	ns	ns	2.9	30	17	6.91	38
29-Jun-13	63.7	10	13	nr	15	nr	7	1,375	2.34	2.9	30	17	6.94	9
30-Jun-13	58.2	10	12	nr	13	nr	6	1,275	2.55	2.9	30	16	6.81	4
Max:	140.5													
Min:	53.8													
Average:	70.5	13		16		8		1,572	2.60			15	6.85	
Total Flow:														
Geo.Mean:														20

Notes:

- (1) Effluent ammonia load based upon Raw Sewage flows and Final NH3-N concentrations
- (2) nr - not recorded or no result; na - not analyzed; ns - no sample
- (3) Where value is expressed as less than (<), the value is halved and used in the calculations
- (4) * = 30 day rolling average

- (5)** Flow, highlighted in bold, in excess of 98.6 ML/D per clause 27 of Licence 2716RR
- (6) Bracketed Coliform results not used in the Geometric Mean calculation
- (7) Raw wastewater flows in excess of 100 ML/D will by-pass the secondary process
- (8) Total Nitrogen results are calculated from TKN and nitrate values